

Title (en)
DETERMINING BLOOD PRESSURE

Title (de)
BESTIMMUNG DES BLUTDRUCKS

Title (fr)
DÉTERMINATION DE LA PRESSION SANGUINE

Publication
EP 4082430 A1 20221102 (EN)

Application
EP 21171027 A 20210428

Priority
EP 21171027 A 20210428

Abstract (en)
According to an aspect, there is provided a computer-implemented method of determining blood pressure of a subject. The method comprises receiving (101) an envelope data set for the subject. The envelope data set comprises measurements of blood flow in a body part of the subject for respective different degrees of restriction applied to the body part. Next the method comprises using (103) a set of probability density functions, PDFs, to determine respective likelihoods for obtaining the measurements in the envelope data set for different pairs of values of the systolic blood pressure and diastolic blood pressure. Finally, the method comprises determining (105) the systolic blood pressure and the diastolic blood pressure for the subject as the pair of values of the systolic blood pressure and diastolic blood pressure that provides the highest likelihood for the envelope data set.

IPC 8 full level
A61B 5/022 (2006.01)

CPC (source: EP US)
A61B 5/022 (2013.01 - US); **A61B 5/02225** (2013.01 - EP); **A61B 5/026** (2013.01 - US); **A61B 5/7264** (2013.01 - EP)

Citation (applicant)
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• US 5704362 A 19980106 - HERSH LAWRENCE T [US], et al
• JOSEF BRIEGEL, M.D ET AL., ANESTHESIOLOGY, vol. 133, November 2020 (2020-11-01), pages 997 - 1006

Citation (search report)
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• [X] LEE SOOJEONG ET AL: "On Using Maximum a Posteriori Probability Based on a Bayesian Model for Oscillometric Blood Pressure Estimation", SENSORS, vol. 13, no. 10, 10 October 2013 (2013-10-10), pages 13609 - 13623, XP055841503, Retrieved from the Internet <URL:https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3859082/pdf/sensors-13-13609.pdf> DOI: 10.3390/s131013609

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
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DOCDB simple family (application)
EP 21171027 A 20210428; CN 202280031475 A 20220426; EP 2022060944 W 20220426; EP 22725739 A 20220426; JP 2023565534 A 20220426; US 202218288403 A 20220426